Biology – SB13C

Curriculum expectation: E1.I

Overall Expectation: C1

Specific Expectation: C 1.2

**Debate Topic:** Animals used in Medical Research.

**Debate Time:** 60 min (Two Periods)

**Context:** (Student handout)

Research using animals became widespread since 1800s.The effectiveness of drugs, procedures and safety of chemicals and medicines on humans is determined by the tests performed on animals.

The education in medical institutes to the students is largely based on animal testing as well as the medical treatments and procedures. Medical researchers vehemently argue that animal use in medical research is absolutely essential for the greater good of mankind. They describe thousand of medicines and vaccines that have eradicated so many diseases and thousands of lives have been saved.

The participant groups in this debate may consider following points to include in their speech.

* Introduction of the Topic and state your position i.e in defense or against to attract the audience attention in the topic.
* Group 1: Affirmative (For)
* Group 2: Against
* Group 3: judges
* Research for your topic can be done in the library magazines, periodicals, and web sites on computer such as: [www.slideshare.net/mercicm/animals-used-for-medical-research](http://www.slideshare.net/mercicm/animals-used-for-medical-research)
* Clearly state your contentions, supported with reason and evidence.
* The types of animals used in research,
* Considerations and potential in animal use,
* State benefits, drawbacks and prospects for the future. You can use slides, posters or diagrams videos to support your speech.
* Conclusion.

**Format:**  The debate will consists of five speeches and two cross examination periods. The time and speeches are as follows:

**Debate procedure:**

* Cross examinations should be relevant, be courteous and face the audience.
* In the first Rebuttal explain that negative observations are not strong and support the “For” position.
* In the second Rebuttal support the “Against” position and try to convince the audience.
* In the second positive Rebuttal respond to the negative comments and conclude effectively.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Speech | Affirmative  Constructive | Cross examination  Of For and Against | Negative  Constructive | Cross examination of negative by affirmative | Affirmative Rebuttal | Negative Rebuttal | Affirmative Rejoinder |
| Time | 6min | 2 min | 6 min | 2 min | 4 min | 4 min | 2 min |

Work period: 5 min

Work period: 3 min

Work period: 1 min

Ballot Casting and announcement of the winner: 10 min

At the conclusion of each component of the debate the class members will be asked to allocate points to each team according to the evaluation chart and give explanatory comments. When the debate is over the points will be summed to find the highest score and decide the winner.

**Evaluation Chart – Ruberic**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Categories | Level 1 | Level2 | Level 3 | Level 4 |
| Knowledge and  understanding. | Limited  Knowledge/understanding | Some  Knowledge/understanding | Considerable knowledge/  understanding | Thorough  Knowledge/  understanding |
| Thinking  And  Investigation. | Limited use | Critical thinking to some extent | Good critical thinking | Excellent use of thinking skills |
| Inquiry/ problem solving/ | Limited effectiveness, | Some use of inquiry skills | Good use of inquiry/ problem solving | High degree of effectiveness |
| Processing/  planning skills. | Limited effectiveness | Some use of  Planning/processing skills | Good planning and processing skills | High degree of effectiveness. |
| Communication  Expression of ideas | Limited use | Some expression | Good use of expression | Highly effective  expression |
| Communication for audiences. | limited | Some communication | Good communication | Excellent communication |
| Use of conventional vocabulary. | Limited use of vocabulary | Some technical vocabulary | Considerable use of vocabulary | Highly effective use of vocabulary |
| Application of  Knowledge/ skills. | Limited application | Some application | Considerable application | Excellent use of application |
| Transfer of knowledge / skills | Limited transfer | Some transfer | Considerable transfer | Excellent transfer |
| Making connection between Science, society and environment. | Limited connection | Some connection | Considerable connection | High degree of connection |
| Proposing course of action. | Limited ideas | Some ideas | Considerable effective ideas | High degree of effective ideas |